

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A method of using a computer for transferring data, comprising:

 sending a request for data from a requesting computer to a targeted computer system;
 ~~determining if the data is in~~ accessing at the targeted computer system a look-up list that
references to identify other computers that have previously requested and received at least a
portion of having the requested data;

~~sending the requests to the other~~ identified computers ~~having the requested data;~~
 ~~encoding at least a portion of the data at the identified computers using an~~
~~acknowledgement independent equalized data packet encoding scheme;~~

 sending the encoded data from the identified computers to a the requesting computer
~~user;~~

 receiving different partial portions of the encoded data from at least two of the sending
computers;

~~decoding the received encoded data~~ from the different partial portions; and
 saving the decoded data in memory.

Claim 2 (Currently Amended): The method of claim 1, wherein data transmission is accomplished from the one or more other computers over a peer-to-peer network, wherein the other computers that previously requested and received at least a portion of the requested data are peers with the requesting computer.

Claim 3 (Original): The method of claim 1, wherein encoded packets are relayed.

Claim 4 (Original): The method of claim 1, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 5 (Original): The method of claim 1, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 6 (Original): The method of claim 1, wherein the look-up list is a mesh list.

Claim 7 (Currently Amended): The method of claim 1, wherein the data is encoded using an acknowledgement independent equalized data packet encoding scheme that is a FEC encoding.

Claim 8 (Original): The method of claim 1, wherein the data that is to be encoded is segmented before encoding.

Claim 9 (Original): The method of claim 1, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

Claim 10 (Currently Amended): A method of using a computer for transferring data, comprising:

receiving a request for data from a computer user;
~~determining if the data is in~~ accessing a look-up list to identify any peer computers that have previously downloaded at least a portion of that references other computers having the requested data;
sending the requests to the identified other computers having the requested data;
encoding the data at the peer computers that have previously downloaded at least a portion of the requested data, wherein the data is encoded using an acknowledgement independent equalized data packet encoding system;
sending the encoded data from at least two different ones of the peer computers to the a-requesting computer user.

Claim 11 (Original): The method of claim 10, wherein data transmission is accomplished over a peer-to-peer network.

Claim 12 (Original): The method of claim 10, wherein encoded packets are relayed.

Claim 13 (Original): The method of claim 10, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 14 (Original): The method of claim 10, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 15 (Original): The method of claim 10, wherein the look-up list is a mesh list.

Claim 16 (Original): The method of claim 10, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 17 (Original): The method of claim 10, wherein the data that is to be encoded is segmented before encoding.

Claim 18 (Currently Amended): A method of using a computer for transferring data from a set of peer computers to a requesting computer, comprising:

receiving a request for data at a source computer from the requesting computer, wherein the source computer maintains a list of peer computers that have previously downloaded at least a portion of the data a user;

encoding the data at the peer computers using an acknowledgement independent equalized data packet encoding scheme; and

sending the encoded data from at least two different ones of the peer computers to the requesting computer user.

Claim 19 (Original): The method of claim 18, wherein data transmission is accomplished over a peer-to-peer network.

Claim 20 (Original): The method of claim 18, wherein encoded packets are relayed.

Claim 21 (Currently Amended): The method of claim 18, wherein the ~~look-up~~ list is populated with nodes based on data transfer rates, and wherein each node represents a different one of the peer computers.

Claim 22 (Currently Amended): The method of claim 18, wherein the ~~look-up~~ list is populated with nodes based on data types stored within the nodes, and wherein each node represents a different one of the peer computers.

Claim 23 (Currently Amended): The method of claim 18, wherein the ~~look-up~~ list is a mesh list.

Claim 24 (Original): The method of claim 18, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 25 (Original): The method of claim 18, wherein the data that is to be encoded is segmented before encoding.

Claim 26 (Currently Amended): A method of using a computer for dynamically transferring data, comprising:

- sending a request for data to a targeted computer capable of servicing the request;
- receiving acknowledgement independent equalized data packets from at least two different sending computers that have previously downloaded at least a portion of the data from the targeted computer;
- decoding the received encoded data; and
- saving the decoded data in memory.

Claim 27 (Original): The method of claim 26, wherein data transmission is accomplished over a peer-to-peer network.

Claim 28 (Original): The method of claim 26, wherein the encoded packets are relayed.

Claim 29 (Currently Amended): The method of claim 26, further comprising maintaining at the targeted computer a list of the computers that have previously downloaded at least a portion of the requested data, wherein the ~~look-up~~ list is populated with nodes based on data transfer rates.

Claim 30 (Currently Amended): The method of claim ~~26~~²⁹, wherein the ~~look-up~~ list is populated with nodes based on data types stored within the nodes, and wherein each of the nodes represents a different one of the computers.

Claim 31 (Currently Amended): The method of claim ~~26~~²⁹, wherein the ~~look-up~~ list is a mesh list.

Claim 32 (Original): The method of claim 26, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 33 (Original): The method of claim 26, wherein the data that is to be encoded is segmented before encoding.

Claim 34 (Original): The method of claim 26, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

Claim 35 (Currently Amended): A system for using a computer for transferring data, comprising:

means to send a request for data from a requesting computer to a targeted computer system;

means to access ~~determine if the data is in~~ a look-up list to identify that ~~references other computers that have previously downloaded at least a portion of~~ having the requested data from the targeted computer;

~~means to send the requests to the other~~ identified computers ~~having the requested data~~;

~~means to encode the data using an acknowledgement independent equalized data packet encoding scheme~~;

~~means to send the request to the other computers having the requested data~~;

~~means to encode the data using an acknowledgement independent equalized data packet encoding scheme~~;

means to send the ~~encoded~~ data from the identified computers to the requesting computer ~~a requested user~~;

means to receive data from ~~sending~~ identified computers;

~~means to decode the received encoded data~~;

means to save the ~~decoded~~ data in memory.

Claim 36 (Original): The system of claim 35, wherein data transmission is accomplished over a peer-to-peer network.

Claim 37 (Currently Amended): The system of claim 35, wherein ~~encoded packets are the~~ data is relayed.

Claim 38 (Currently Amended): The system of claim 35, wherein the look-up list is populated with nodes based on data transfer rates, and wherein each of the nodes represents a different one of the computers that have previously downloaded the data, and wherein the data transfer rates represents data transfer rates at which the data was previously downloaded to the computers.

Claim 39 (Original): The system of claim 35, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 40 (Original): The system of claim 35, wherein the look-up list is a mesh list.

Claim 41 (Currently Amended): The system of claim 35, further comprising means to encode the data at the identified computers using an acknowledgement independent equalized data packet encoding scheme prior to sending ~~wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.~~

Claim 42 (Currently Amended): The system of claim ~~35~~ 41, wherein the ~~data that is to be encoded is segmented before encoding~~ acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 43 (Currently Amended): The system of claim ~~35~~ 41, wherein the received encoded packets are decoded at the requesting computer, and then re-encoded for further transmission upon request.

Claim 44 (Currently Amended): A system for using a computer for transferring data, comprising:

means to receive a request for data from a computer user;

means to access a look-up list to identify a set of peer computers that have previously requested and downloaded at least a portion of the data ~~determine if the data is in a look-up list that references other computers having the requested data;~~

means to send-initiate transfer of the previously downloaded data from identified computers to the requesting computer ~~the requests to the other computers having the requested data;~~

means to encode the data at the identified computers using an acknowledgement independent equalized data packet encoding scheme;

means to send the encoded data from the identified computers to the a requesting computer user.

Claim 45 (Currently Amended): The system of claim 44, wherein data transmission is accomplished over a peer-to-peer network, and wherein the computers that have previously downloaded the data are peers with the requesting computer.

Claim 46 (Original): The system of claim 44, wherein encoded packets are relayed.

Claim 47 (Original): The system of claim 44, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 48 (Original): The system of claim 44, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 49 (Original): The system of claim 44, wherein the look-up list is a mesh list.

Claim 50 (Original): The system of claim 44, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 51 (Original): The system of claim 44, wherein the data that is to be encoded is segmented before encoding.

Claim 52 (Currently Amended): A system ~~for using a computer~~ for transferring data from a set of peer computers to a requesting computer, comprising:

means to receive at a source computer a request for to download data, wherein the source computer maintains a list of peer computer that have previously downloaded at least a portion of the data from a user;

means to encode the data at the peer computers using an acknowledgement independent equalized data packet encoding scheme at the direction of the source computer;

means to send the encoded data from the peer computers to a requesting computer to the user.

Claim 53 (Original): The system of claim 52, wherein data transmission is accomplished over a peer-to-peer network.

Claim 54 (Original): The system of claim 52, wherein encoded packets are relayed.

Claim 55 (Currently Amended): The system of claim 52, wherein the ~~look-up~~ list is populated with nodes based on data transfer rates.

Claim 56 (Currently Amended): The system of claim 52, wherein the ~~look-up~~ list is populated with nodes based on data types stored within the nodes.

Claim 57 (Currently Amended): The system of claim 52, wherein the ~~look-up~~ list is a mesh list.

Claim 58 (Original): The system of claim 52, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 59 (Original): The system of claim 52, wherein the data that is to be encoded is segmented before encoding.

Claim 60 (Currently Amended): A system ~~for using a computer~~ for dynamically transferring data from a set of peer computers to a requesting computer, comprising:

means to send a request for data to a targeted computer capable of servicing the request;

means to receive acknowledgement independent equalized data packets from sending computers that have previously downloaded at least a portion of the data from the targeted computer;

means to decode the received encoded data; and

means to save the decoded data memory.

Claim 61 (Original): The system of claim 60, wherein data transmission is accomplished over a peer-to-peer network.

Claim 62 (Original): The system of claim 60, wherein encoded packets are relayed.

Claim 63 (Currently Amended): The system of claim 60, further comprising means for maintaining at the targeted computer a list of the computers that have previously downloaded at least a portion of the requested data, wherein the ~~look-up~~ list is populated with nodes based on data transfer rates.

Claim 64 (Currently Amended): The system of claim ~~63~~60, wherein the ~~look-up~~ list is populated with nodes based on data types stored within the nodes.

Claim 65 (Currently Amended): The system of claim ~~63~~60, wherein the ~~look-up~~ list is a mesh list.

Claim 66 (Original): The system of claim 60, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 67 (Original): The system of claim 60, wherein the data that is to be encoded is segmented before encoding.

Claim 68 (Original): The system of claim 60, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

Claim 69 (Currently Amended): A program stored on a medium readable by a processor, the program; comprising:

a module to send a request for data to a targeted computer system, wherein the targeted computer system accesses;

~~a module to determine if the data is in~~ a look-up list that references other peer computers that previously downloaded at least a portion of having the requested data and initiates transfer from the identified peer computers to the requesting computer using an;

~~a module to send the request to the other computers having the requested data packet~~ encoding scheme;

~~a module to send the encoded data to a requesting users~~;

a module to receive the encoded data from identified peer sending computers;

a module to decode the received encoded data; and

a module to save the decoded data in memory.

Claim 70 (Original): The medium of claim 69, wherein data transmission is accomplished over a peer-to-peer network.

Claim 71 (Original): The medium of claim 69, wherein encoded packets are relayed.

Claim 72 (Currently Amended): The medium of claim 69, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 73 (Original): The medium of claim 69, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 74 (Original): The medium of claim 69, wherein the look-up list is a mesh list.

Claim 75 (Original): The medium of claim 69, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 76 (Original): The medium of claim 69, wherein the data that is to be encoded is segmented before encoding.

Claim 77 (Original): The medium of claim 69, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

Claim 78 (Currently Amended): A program stored on a medium readable by a processor, the program, comprising:

a module to receive a request for data from a user requesting computer having one or more peer computers;

a module to ~~determine if the data is in a look-up list~~ identify which of the peer computers have previously requested and downloaded the data ~~that references other computers having the requested data~~;

a module to send ~~the requests~~ to the ~~other~~ identified peer computers to direct the peer computers to having the requested data;

~~a module to~~ encode the data using an acknowledgement independent equalized data packet encoding scheme and ;

~~a module to~~ send the encoded data to the requesting computer ~~a requesting user~~.

Claim 79 (Original): The medium of claim 78, wherein data transmission is accomplished over a peer-to-peer network.

Claim 80 (Original): The medium of claim 78, wherein encoded packets are relayed.

Claim 81 (Currently Amended): The medium of claim 78, further comprising a module that maintains a ~~wherein the~~ look-up list that identifies the peer computers that previously downloaded the data, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 82 (Currently Amended): The medium of claim ~~81~~78, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 83 (Currently Amended): The medium of claim ~~81~~78, wherein the look-up list is a mesh list.

Claim 84 (Original): The medium of claim 78, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 85 (Original): The medium of claim 78, wherein the data that is to be encoded is segmented before encoding.

Claim 86 (Currently Amended): A program stored on a medium readable by a processor of a peer computer, the program; comprising:

- a module to download data from a source computer;
- a module to receive a request from the source computer to transfer the data to a requesting computer; ~~for data from a user;~~
- a module to encode the previously downloaded data using an acknowledgement independent equalized data packet encoding scheme; and
- a module to send the encoded data to the requesting computer user.

Claim 87 (Original): The medium of claim 86, wherein data transmission is accomplished over a peer-to-peer network.

Claim 88 (Original): The medium of claim 86, wherein encoded packets are relayed.

Claim 89 (Currently Amended): The medium of claim 86, wherein the source computer maintains a look-up list that lists the peer computers having previously downloaded the data, and wherein the look-up list is populated with nodes based on data transfer rates.

Claim 90 (Currently Amended): The medium of claim ~~86~~89, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 91 (Currently Amended): The medium of claim ~~86~~89, wherein the look-up list is a mesh list.

Claim 92 (Original): The medium of claim 86, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 93 (Original): The medium of claim 86, wherein the data that is to be encoded is segmented before encoding.

Claim 94 (Currently Amended): A program stored on a medium readable by a processor of a computer having a plurality of peer computers, the program, comprising:

a module to send a request for data to a targeted computer capable of servicing the request;

a module to receive acknowledgement independent equalized data packets from the peer computers that previously downloaded the data from the targeted computer sending computers;

a module to decode the received encoded data; and

a module to save the decoded data in memory.

Claim 95 (Currently Amended): The medium module of claim 94, wherein data transmission is accomplished over a peer-to-peer network.

Claim 96 (Currently Amended): The medium module of claim 94, wherein encoded packets are relayed.

Claim 97 (Currently Amended): The medium module of claim 94, wherein the targeted computer maintains a look-up list is populated with nodes based on data transfer rates.

Claim 98 (Currently Amended): The medium module of claim 94, wherein the targeted computer maintains a look-up list is populated with nodes based on data types stored within the nodes.

Claim 99 (Currently Amended): The medium module of claim 94, wherein the targeted computer maintains a look-up list is a mesh list.

Claim 100 (Currently Amended): The medium module of claim 94, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 101 (Currently Amended): The medium module of claim 94, wherein the data that is to be encoded is segmented before encoding.

Claim 102 (Currently Amended): The medium module of claim 94, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

Claim 103 (Currently Amended): A network transmission apparatus comprising:

- a processor;
- a memory communicatively connected to the processor;
- a program, stored in the memory, including,
 - a module to send a request for data to a targeted computer system, wherein the targeted computer system accesses;
 - ~~a module to determine if the data is in~~ a look-up list that references other peer computers that previously downloaded at least a portion of having the requested data and initiates transfer from the identified peer computers to the requesting computer using an;
 - ~~a module to send the request to the other computers having the requested data~~ packet encoding scheme;
 - ~~a module to send the encoded data to a requesting users~~;
 - a module to receive the encoded data from identified peer sending computers;
 - a module to decode the received encoded data; and
 - a module to save the decoded data in memory.

Claim 104 (Original): The apparatus of claim 103, wherein data transmission is accomplished over a peer-to-peer network.

Claim 105 (Original): The apparatus of claim 103, wherein encoded packets are relayed.

Claim 106 (Original): The apparatus of claim 103, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 107 (Original): The apparatus of claim 103, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 108 (Original): The apparatus of claim 103, wherein the look-up list is a mesh list.

Claim 109 (Original): The apparatus of claim 103, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 110 (Original): The apparatus of claim 103, wherein the data that is to be encoded is segmented before encoding.

Claim 111 (Original): The apparatus of claim 103, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

Claim 112 (Currently Amended): A network transmission apparatus, comprising:

- a processor;
- a memory, communicatively connected to the processor;
- a program, stored in the memory, including:
 - a module to receive a request for data from a user requesting computer having one or more peer computers;
 - a module to ~~determine if the data is in a look-up list~~ identify which of the peer computers have previously requested and downloaded the data that references other computers having the requested data; and
 - a module to send the requests to the other identified peer computers to direct the peer computers to having the requested data;
 - ~~a module to encode the data using an acknowledgement independent equalized data packet encoding scheme~~;
 - ~~a module to send the encoded data to the requesting computer~~ a requesting user.

Claim 113 (Original): The apparatus of claim 112, wherein data transmission is accomplished over a peer-to-peer network.

Claim 114 (Currently Amended): The apparatus of claim 112, wherein ~~encoded packets are~~ the data is relayed.

Claim 115 (Currently Amended): The apparatus of claim 112, wherein the program further comprises a module that maintains a lookup list, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 116 (Currently Amended): The apparatus of claim 112, wherein the program further comprises a module that maintains a lookup list, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 117 (Currently Amended): The apparatus of claim 112, wherein the program further comprises a module that maintains a lookup list, wherein the look-up list is a mesh list.

Claim 118 (Currently Amended): The apparatus of claim 112, wherein the module that sends the requests to the identified peer computers further directs the peer computers to encode the data using an ~~the acknowledgement independent equalized data packet encoding scheme is a FEC-encoding.~~

Claim 119 (Currently Amended): The apparatus of claim ~~112~~ 118, wherein the data that is to be encoded is segmented before encoding.

Claim 120 (Currently Amended): A network transmission apparatus, comprising:

a processor;

a memory, communicatively connected to the processor;

a program, stored in the memory, including,

a module to download data from a source computer;

a module to receive a request from the source computer to transfer the data to a peer computer; ~~for data from a user;~~

a module to encode the previously downloaded data using an acknowledgement independent equalized data packet encoding scheme; and

a module to send the encoded data to the peer computer user.

Claim 121 (Original): The apparatus of claim 120, wherein data transmission is accomplished over a peer-to-peer network.

Claim 122 (Original): The apparatus of claim 120, wherein encoded packets are relayed.

Claim 123 (Currently Amended): The apparatus of claim 120, wherein the source computer maintains a look-up list that is populated with nodes based on data transfer rates.

Claim 124 (Currently Amended): The apparatus of claim 120, wherein the source computer maintains a look-up list that is populated with nodes based on data types stored within the nodes.

Claim 125 (Currently Amended): The apparatus of claim 120, wherein the source computer maintains a look-up list that is a mesh list.

Claim 126 (Original): The apparatus of claim 120, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 127 (Original): The apparatus of claim 120, wherein the data that is to be encoded is segmented before encoding.

Claim 128 (Currently Amended): A network transmission apparatus, comprising:

- a processor;
- a memory, communicatively connected to the processor;
- a program, stored in the memory, including,
 - a module to send a request for data to a targeted computer capable of servicing the request;
 - a module to receive acknowledgement independent equalized data packets from at least two or more different the peer computers that previously downloaded the data from the targeted computer ~~sending computers~~;
 - a module to decode the received encoded data; and
 - a module to save the decoded data in memory.

Claim 129 (Original): The apparatus of claim 128, wherein data transmission is accomplished over a peer-to-peer network.

Claim 130 (Original): The apparatus of claim 128, wherein encoded packets are relayed.

Claim 131 (Currently Amended): The apparatus of claim 128, wherein the targeted computer maintains a look-up list that is populated with nodes based on data transfer rates.

Claim 132 (Currently Amended): The apparatus of claim 128, wherein the targeted computer maintains a look-up list that is populated with nodes based on data transfer rates.

Claim 133 (Currently Amended): The apparatus of claim 128, wherein the targeted computer maintains a look-up list that is a mesh list.

Claim 134 (Original): The apparatus of claim 128, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

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Claim 135 (Original): The apparatus of claim 128, wherein the data that is to be encoded is segmented before encoding.

Claim 136 (Original): The apparatus of claim 128, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.